

## MEMORANDUM

**DATE:** October 18, 2007

**TO:** Board of Environmental Protection

**FROM:** Deb Avalone-King and Marc Cone, Bureau of Air Quality

**RE:** Amendment of CHAPTER 121 EMISSION LIMITATIONS AND TESTING OF MAINE WASTE COMBUSTOR FACILITIES (MWC) and the State Plan for Large and Small MWC Facilities

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Statutory and Regulatory Reference: 38 MRSA 590 and 585A, 585B.

Location/Applicability: Statewide

Description:

The Clean Air Act directs the Environmental Protection Agency (EPA) to set standards requiring companies to reduce emissions of toxic air pollutants. This is accomplished by setting performance standards, work practice standards or emission limitations based on controls and practices for each regulated industry. The CAA also requires states to adopt a Municipal Waste Combustor (MWC) 111D Plan for implementation, that incorporates the requirements established by the EPA. The revised State Plan incorporates recent federal changes for Large MWC facilities and now incorporates the federal standards for Small MWC facilities as well.

Currently there are four (4) Maine facilities subject to the 111D Plan.

The rule is implemented using the State's Title V Licensing process. Each of the four facilities will incorporate the federal standards as established in 40 CFR Subparts Cb, Eb and BBBB Emission Guidelines for Municipal Waste Combustors.

The Department proposed amendment of the Chapter 121 Emissions Limitations and Emissions Testing of Resource Recovery Facilities rule in order to update the rule pursuant to the federal guidelines as established in 40 CFR Subpart Cb and state priorities for dioxin reductions. The proposed rule also incorporates all federal requirements for operating practices, operator training, compliance and performance testing, reporting, recordkeeping and compliance schedules.

The federal requirements update emission limits for particulate material (PM), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrous oxides (NO<sub>x</sub>), mercury (Hg), lead (Pb), cadmium (Cd), hydrochloric acid (HCl), dioxin, furan, and opacity.

Because of the ongoing level of concern about dioxin emissions in the State, the Bureau requested to adopt a more stringent dioxin standard for large facilities. Based on stack testing results and past demonstrated performance, MWCs have been able to achieve significantly lower emissions of dioxin than the Federal Standards. Therefore, it seems reasonable to incorporate those improvements into the regulation.

Based on information currently available, all Maine's facilities covered by the rule are expected to be able to comply with the more stringent standards without significant expenditures over and above those already required to meet the federal standard.

### **Discussion:**

Chapter 121 and the MWC State Plan recently went through the public hearing process to update new federal and state requirements. An extended 'Opportunity for Comment' period was requested to correct an inadvertent error regarding the mercury emission limit for small waste combustors that was brought to our attention which created a significant inequity in the mercury standards that were stipulated in the rule. In our attempt to provide clearer language regarding Maine's mercury limits that matched the limits established for large MWC facilities, this phrase was left out: Mercury 28 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen (dry basis), whichever is less stringent;

All comments from the original public hearing comment period were incorporated into the rule and plan, details are provided in the Supplemental Basis Statement. During the extended comment period, only one additional comment was received and has been incorporated into the Supplemental Basis Statement. That request for additional clarification of a federally approved operational protocol was not incorporated into Chapter 121, as the operations protocol was already provided for within the federal standards that we are adopting by reference.

### **Environmental Issue(s):**

The MWC STATE PLAN including Chapter 121, protects against a direct and immediate threat to the public health, safety or welfare of Maine citizens. Heavy metal compounds, such as mercury, lead, and cadmium, are known as Hazardous Air Pollutants, or HAPs, as defined by section 112(b) of the Clean Air Act. Certain VOCs, such as chloroform and toluene, are also HAPs. Heavy metal HAPs may be carcinogenic (cause cancer), mutagenic (cause reproduction capability problems), or teratogenic (cause birth defects in developing embryo and fetuses). In addition, certain HAPs are associated with other liver impairment, irritation (eyes and upper respiratory), and may be central nervous system (CNS) depressants.

### **Public Hearing and Notice:**

A public hearing was held on Thursday, April 5, 2007. The end of the public comment period was April 19, 2007 and the end of the extended public comment period was September 21, 2007. The Bureau now recommends *approval* of the proposed amendments to Maine's 111(d) MWC STATE PLAN for Large and Small Facilities and *adoption* of amendments to Chapter 121.

*Enclosures with this packet include the amended Chapter 121 and the State Plan for Large and Small MWC Facilities.*